Information On Certain Oil And Gas Industry Oversight Responsibilities B-146333

Department of the Interior

BY THE COMPTROLLER GENERAL OF THE UNITED STATES

E00780-004

Information on Certain Oil and Gas Industry Oversight Responsibilities. P-74-RED-247. June 17, 1974. 12 pp.

Agency Sponsoring Evaluation: Resources and Economic Development Division, GAO.

Agency Managing Program: Department of the Interior.

Program(s) Evaluated: Program Management, Dept. of the Interior (15.000).

Budget Function/Subfunction: Conservation and land management (302); Energy (305).

Program Authorization: Outer Continental Shelf Lands Act (P.L. 83-212; 43 USC 1332).

Public Availability: GAO/Distribution Section.

This report provides data relating to the Interior Department's oversight responsibilities of oil and gas industries. The data involve the sources of Geological Survey statistics on U.S. oil and gas reserves, exchange of Outer Continental Shelf (offshore) data between Survey and the Bureau of Land Management, justification for not releasing offshore geologic and seismic data to the public, basis for Survey testimony before the House Committee on Interior and Insular Affairs during December 1973 regarding capped wells on Federal lands, and prior employment by the oil industry of certain Department officials.

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-146333

The Honorable John E. Moss
House of Representatives

Dear Mr. Moss:

As you requested on September 26, 1973, and as your office agreed, we are furnishing certain data relating to the Department of the Interior's oversight responsibilities as they relate to the oil and gas industries.

The data involves (1) the source of Geological Survey statistics on U.S. oil and gas reserves, (2) the exchange of Outer Continental Shelf (offshore) data between Survey and the Bureau of Land Management (BLM), (3) the justification for not releasing offshore geologic and seismic data to the public, (4) the basis for Survey testimony before the House Committee on Interior and Insular Affairs during December 1973, regarding capped wells on Federal lands, and (5) the prior employment by the oil industry of certain Department officials.

OIL AND GAS RESERVE STATISTICS

You asked for the source of published Survey statistics showing the extent of U.S. oil and gas reserves. If the source of the statistics was the oil and gas industries, you asked us to ascertain from Survey officials (1) why Survey does not independently gather such data and (2) whether Survey verifies any of the data obtained from industries.

According to a Survey official, Survey generally obtains the reserve statistics from the Bureau of Mines (BOM), which is responsible for collecting oil and gas reserve statistics for the Department. BOM obtains the reserve statistics from the American Petroleum Institute and the American Gas Association.

BOM officials told us that they used these organizations' reserve statistics because they had been prepared on a basis consistent with prior years' statistics and that, if the Department also prepared them, it would be a tremendous duplication of industries' effort. BOM had not determined the costs which would be involved if it computed its own oil and gas reserve statistics.

Another BOM official said that oil and gas reserve statistics could be prepared for leased Federal lands but that these statistics would represent only a portion of total oil and gas reserves and production. During calendar year 1972 U.S. oil production amounted to about 3.3 billion barrels but only about 596 million barrels (18 percent) were produced on Federal lands. BOM had no authority to require the oil and gas industries to submit reserve data on privately owned lands, but the industries could submit data voluntarily.

BOM officials stated that BOM did not verify the organizations' statistics because their policies prohibited verification. Each organization has adopted a policy of strict confidence with respect to basic data and estimates of reserve capacity for individual oilfields which support the summary data these organizations published. BOM officials said that personnel of BOM or of the Department's Office of Oil and Gas occasionally monitored the organizations' meetings in which the reserve statistics were developed to insure that the policy and methodology used in preparing the statistics were consistent with those of prior years.

EXCHANGE OF OUTER CONTINENTAL SHELF DATA BETWEEN BLM AND SURVEY

You asked us to determine what types of data, which BLM and Survey collected in carrying out their offshore responsibilities, were not exchanged and the justification BLM and Survey officials gave for not exchanging such data. Written agreements between Survey and BLM provide for exchange of the data needed by both agencies and the procedures to be followed in tract selection, presale evaluation of the tracts, and postsale evaluation of the bids received on the tracts. Although we ascertained the Department's overall leasing procedures, we did not examine how such procedures had been carried out.

The Outer Continental Shelf Lands Act (43 U.S.C. 1332) authorizes the Department to lease offshore lands for the production of oil and gas. BLM is responsible for leasing offshore lands. The joint BLM and Survey tract selection and evaluation procedures include the following.

Tentative schedule development

Tentative schedule development refers to developing and updating the Department's tentative offshore leasing schedule. At this stage the Department identifies general sale areas and, on the basis of its broad resource knowledge, develops tentative acreage figures for each sale. Such actions are intended to provide for orderly development of offshore resources and to maintain the proper contribution of offshore production of oil and gas to the national supply.

BLM is responsible for preparing the leasing schedule. Survey acts in an advisory role and provides information to BLM on possible areas which may contain oil and gas.

Tract selection

In selecting tracts Survey and BLM gather and review more detailed geophysical, geological, engineering, and economic resource information on areas proposed for leasing. On the basis of that review, a more refined estimate of the potential supply of hydrocarbons is made. The number of acres to be leased is modified, as necessary, to maintain a rate of production which will meet the demand for these resources.

In August 1971 Survey and BLM initiated a formal agreement which identified their responsibilities in tract selection.

The BLM field office is responsible for obtaining the historical and current leasing status of all tracts selected and their locations with respect to hazardous areas, such as ship anchorage areas and pipelines. The Survey field office is responsible for obtaining technical information, including geological, geophysical, paleontological, and engineering information, to determine which tracts to recommend for selection. The BLM and Survey headquarters staffs jointly make the final selection of the tracts on the basis of field office recommendations.

Presale evaluation

In the presale evaluation process, more refined resource estimates are developed and provided for use in evaluating the bids on each tract. Before a lease sale, Survey calculates presale values of the offshore tracts offered for lease and BLM reviews the methodology and the adequacy of some of the data Survey used to calculate the presale value of each tract offered for lease. Survey provides the geological, geophysical, and engineering inputs which it gets by analyzing in-house, the data industry submits to the Government and seismic information it purchases. BLM provides certain economic inputs, including estimates of capital and operating expenses, discount rates, and procedures to follow in calculating taxes. Survey uses this information to calculate presale values for the tracts offered for lease.

A December 1971 formal evaluation agreement between BLM and Survey established each agency's responsibilities in the evaluation process--both presale and postsale.

Sale and postsale procedures

BLM conducts the lease sale. After the sale, Survey evaluates the bids and recommends to BLM whether to accept or reject the bid for each tract. Survey must also submit its rationale for each recommendation to BLM. BLM then decides whether to accept or reject the bid for each tract.

JUSTIFICATION FOR NOT RELEASING GEOLOGIC AND SEISMIC DATA TO THE PUBLIC

You asked us to obtain Survey's justification for not releasing offshore geologic and seismic data (a type of geophysical data) to the public. According to Survey officials public disclosure of geological and geophysical data is prohibited by law and by the terms of the contract for purchasing the data.

The public information section of the Administrative Procedure Act (5 U.S.C. 552) requires Federal agencies to make certain information in its files available for public inspection and copying. The act exempts from this public disclosure requirement certain matters,

such as (1) trade secrets and commercial or financial information obtained from a person, which are privileged or confidential, and (2) geological and geophysical information and data concerning wells.

Title 30 of the Code of Federal Regulations requires the lessees of Federal lands to submit geological and geophysical data to Survey. Section 250.97 of title 30, which was issued under the authority granted the Secretary by the Outer Continental Shelf Lands Act, provides that geological and geophysical data required to be submitted not be available for public inspection without the lessee's consent so long as the lease is in effect or unless Survey's Outer Continental Shelf supervisor determines that release of the data is required and necessary for proper development of a field or area.

Public disclosure and public inspection as used in 5 U.S.C. 552 and 30 CFR 250.97 apply to disclosure and inspection outside the Federal Government.

The contract terms under which Survey purchases seismic data can also preclude public disclosure and inspection. Survey purchases seismic data either on an exlusive or on a nonexclusive basis. It purchases the data from the oil and gas industries and from private firms which carry out geophysical explorations. It generally purchases seismic data on a nonexclusive basis because it is cheaper. However, because nonexclusive data on certain areas was not available, Survey has recently entered into exclusive data contracts. Survey issued 11 contracts for the purchase of seismic data from July 1, 1973, to April 19, 1974; 2 contracts were for exclusive data and 9 were for nonexclusive data.

Survey purchases nonexclusive data either from a firm that retains the right to sell the data to others or from a group of oil companies that have obtained the data jointly to reduce costs. Survey obtains only rights to use the data for internal Government purposes. According to a Survey official, seismic data can be purchased by other parties on a nonexclusive basis provided that there is a willing seller and that the buyer agrees to the restrictive use of the data.

Under four nonexclusive data contracts, Survey paid about $254,000 for data which, on the basis of cost information in

Survey's contract files, would have cost it about $4.3 million under an exclusive data contract. The following schedule shows the detail on each contract.

Number of contracts	Miles of seismic data purchased	Survey's purchase price	Cost to acquire data on exclusive basis (note a)
2	5,688	$ 83,248	$1,592,640
1	10,000	126,144	2,260,000
1	3,500	45,100	496,717
4	19,188	$254,492	$4,349,357

[a] Some amounts are estimated because the seismic survey was not completed during Survey's contract negotiations.

Survey's five other nonexclusive data contract files did not contain information on the cost to acquire the data on an exclusive basis.

When Survey purchases data on an exclusive basis, it obtains (1) unlimited and sole rights to publish, translate, reproduce, deliver, use, and dispose of the data in any manner and to authorize others to do so, (2) flexibility with respect to desired coverage, and (3) title to the data. Survey officials told us that Survey would make exclusive data available to the public through such methods as press releases and contract announcements in the Commerce Business Daily. The two contracts for the exclusive data had not been completed as of May 15, 1974.

On May 16, 1974, the Department published in the Federal Register proposed amendments to the regulations issued pursuant to the Outer Continental Shelf Lands Act. The proposed amendments deal with geological and geophysical exploration under permits and pursuant to offshore leases and the submission of such exploration data to Survey and disclosure to the public. The proposed amendments include the following requirements.

1. Geological and geophysical data acquired under an exploration permit shall be made available to Survey within 30 days after

collection. However, if the data discloses environmental hazards or indicates that oil or gas exist, it shall be made available to Survey immediately.

2. For any person to be a qualified bidder at an offshore lease sale after January 1, 1975, that person must have made available to Survey, within 120 days after the call for nominations for that sale is published in the Federal Register, specified types of geological and geophysical data obtained after August 7, 1953 (date that the Outer Continental Shelf Lands Act was enacted).

3. Geological and geophysical data obtained before January 1, 1975, shall not be made available for public inspection without the lessee's consent so long as the lease remains in effect or until Survey determines that releasing such data is required and necessary for the proper development of a field or area. However, data which discloses environmental hazards shall be made public immediately.

4. Geological and geophysical data obtained after January 1, 1975, shall be made available for public inspection 60 days after the data is obtained, if relating to offshore lands which have been leased, or 10 years after the data is obtained or after a lease is issued, whichever is sooner, if relating to offshore lands which have not been leased. Data obtained under an exploration permit which indicates that oil or gas exist may be made public immediately when judged to be significant by the Director of Survey. However, data depicting environmental hazards shall be made public immediately.

The amendments are not final because they may be modified as the result of a public hearing the Department has scheduled for July 15, 1974, in Washington, D.C.

STATISTICAL DATA ON SHUT-IN WELLS ON FEDERAL AND INDIAN LANDS

You requested that we review and summarize for you the information relating to capped oil wells on Federal lands, on which a Survey official had based his December 1973 testimony before the House Committee on Interior and Insular Affairs.

The official told us that his testimony did not pertain to the number of capped wells, but rather to the number of producible areas within wells that had been shut in[1] as of October 31, 1973. Capped wells are oil and/or gas wells which were drilled and then sealed. A well may contain several independently producible areas which may be shut in on a selective basis when production is no longer warranted. (See app. I.)

The official told us that Survey had no summary information readily available on the number of capped wells on public lands or on the reasons for capping. At our request, Survey is preparing this information. According to a Survey official, this information will be available about July 1974. If you desire, we will send you this information when it is obtained.

Statistical data on
shut-in producible areas within wells

A Survey official said that his testimony before the Committee was prepared by Survey from October 31, 1973, data on Federal and Indian lands furnished by the oil industry. This data did not include all the specific reasons why the producible areas were shut in. This data indicated that, as of October 31, 1973, 2,458 (10.9 percent) of the 22,607 producible oil areas had been shut in and that 921 (8.5 percent) of the 10,846 producible gas areas had been shut in. Survey estimated that, if placed in production, the producible areas would supply approximately 12,000 barrels of oil and 185,000,000 cubic feet of gas a day. On the basis of 1972 production, this would be 0.7 percent and 1.6 percent of the total production of oil and gas, respectively, on Federal and Indian lands.

After the testimony in March 1974, Survey gave the House Committee on Interior and Insular Affairs December 1973 statistics on the number and the reasons why producible oil and gas areas had been shut in on onshore Federal lands. Survey prepared the statistics from data the oil industry submitted. The statistics

[1]The closing of valves on a well so that it stops production.

show that most of the producible oil and gas wells had been shut in because of low productivity. Appendix II is a copy of the statistics given to the Committee.

PRIOR EMPLOYMENT OF GOVERNMENT OFFICIALS BY OIL AND GAS INDUSTRIES

A University of Oklahoma study group issued a report entitled "Energy Under the Oceans." The report assessed technology of offshore oil and gas operations. In its report the study group, in referring to the relationship between the petroleum industry and Government, stated that:

> "The relationship was and continues to be close. In fact, many individuals move into and out of both government and industry, particularly at middle and upper levels of management in government usually filled by political appointees."

You requested that we determine what basis the study group had for this statement. You also asked us to review the personnel records of those individuals who held selected Department positions for the past 5 years to determine if any of these individuals had been employed previously by the oil and gas industries or by legal firms representing the oil and gas industries.

One of the study group's principal investigators told us that the statement was based on the investigators' general knowledge, the group's review of a book, and the study group's list of Government employees who had prior employment with the industries. The book cited by the investigator pertained only from World War I through the Korean war and not to any recent period. One of the study group's principal investigators also told us that the list of Government employees could not be located.

We reviewed the personnel folders of 36 employees who held certain top-level positions in Survey, BLM, and the Office of Oil and Gas (functions of this Office were transferred to the Federal Energy Office effective December 4, 1973) during the 5-year period ended November 1973. The names of the employees who held these positions had been furnished to us by the three agencies. Of the

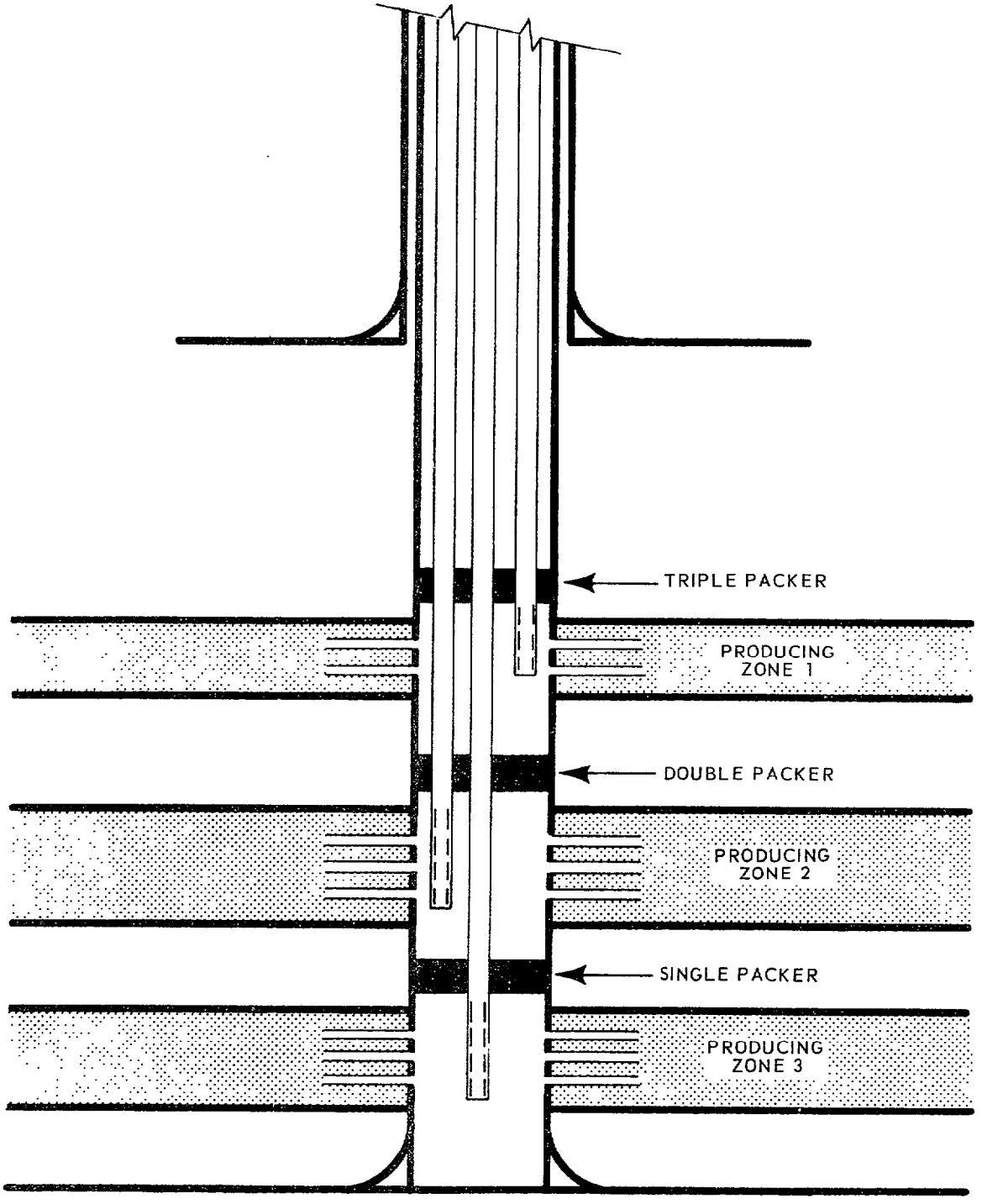
36 employees, 21 recorded no previous employment with the oil and gas industries or with law firms having industry clients. Of the 15 employees recording such employment, 11 were employed in the Office of Oil and Gas and 4 in Survey. One of these 15 employees worked last in private industry in 1972, 2 in 1969, and 12 in 1967 or earlier.

We do not plan to distribute this report further unless you agree or publicly announce its contents.

Sincerely yours,

Comptroller General
of the United States

A SCHEMATIC DRAWING SHOWING SUBSURFACE DETAILS OF A MULTIPLE-TYPE WELL COMPLETION, A PROCESS BY WHICH IT IS POSSIBLE TO PRODUCE FROM DIFFERENT ZONES THROUGH THE SAME WELL BORE



SOURCE: "Primer of Oil and Gas Production," published by the American Petroleum Institute.

SHUT-IN WELLS: ONSHORE FEDERAL LANDS
(See GAO note.)

The number of producible zone completions (not wells) on Federal onshore lands which were shut-in as of December 31, 1973, was as follows:

Oil	Gas	Total
2,119	872	2,991

These zone competions are shut-in for a number of different reasons, as follows:

Reason for being shut-in	Number of zones
1. Low productivity.	1,878
2. Newly completed wells not yet connected or wells remotely located from existing marketing facilities.	457
3. High water-oil ratio.	372
4. High gas-oil ratio.	112
5. Producible wells in secondary recovery projects shut in pending conversion to water injection.	91
6. Downhole mechanical problems.	60
7. Helium and CO_2 wells - No market demand.	11
8. Gas wells used for injection and withdrawal in gas storage projects.	4
9. Shut-in by court order.	3
10. Surface equipment problems.	3
	2,991

There were no zone completions shut-in at the direction of the Geological Survey as of December 31, 1973.

GAO note: This represents shut-in zones within wells.